

MEMORANDUM FOR: Distribution

FROM: W/OPS1 - Mark Paese (acting)

SUBJECT: Console Replacement System (CRS) Voice Improvement
Processor (VIP) Software Upgrade Procedures

1. Material Transmitted:

Engineering Handbook No. 7, Communications Equipment,
Section 5.0, Software Note 3, CRS VIP Software Upgrade
Procedures.

2. Summary:

Request for Change AA525 authorizes CRS VIP software upgrade
version 2.0 installation for 121 Weather Forecast Offices
(WFO), two National Weather Service Headquarters (WSH) systems,
two National Reconditioning Center (NRC) systems, and two NWS
Training Center (NWSTC) systems.

3. Effect on Other Instructions:

None.

Distribution:

All holders of EHB-7.

COMMUNICATIONS EQUIPMENT SOFTWARE NOTE 3 (for Electronics Technicians)

Maintenance Branch

W/OPS12: GSS

SUBJECT : Voice Improvement Processor (VIP) Software Upgrade Procedures

PURPOSE : This document contains the procedures for performing the VIP software upgrade version 2.0. The tasks required for the VIP software upgrade are detailed in attachment **A**.

SITES
AFFECTED : All CRS Sites.

EQUIPMENT
AFFECTED : CRS (ASN: B440-1A10)

PARTS REQUIRED : None.

PARTS SUPPLIED
BY THE SITE : None.

TOOLS AND
TEST EQUIPMENT
REQUIRED : None.

TIME REQUIRED : One hour.

EFFECT ON OTHER
INSTRUCTIONS : None.

AUTHORIZATION : The authority for this modification is Request for Change AA525

VERIFICATION
STATEMENT : This procedure was tested and verified at the National Weather Service Headquarters (WSH), Silver Spring, Maryland (SLVM2).

GENERAL : This procedure contains the instructions for updating the CRS VIP software load version 2.0. This software note is installed over VIP version 1.3. CRS Modification Note 65 must be successfully completed before executing this note.

TECHNICAL
ASSISTANCE : For questions or problems pertaining to this software note, please contact Joel Nathan at (301) 713-0191, x119, Nancy Helderman x139, Sung Vo x192, or Antoine Moran x193.

PROCEDURE : Attachment **A** provides procedures for implementing this software load.
Attachment **B** provides a completed sample of the WS Form A-26, Maintenance Record.

REPORTING : Report the completed software load on a WS Form A-26 according to
INSTRUCTIONS the instructions in Engineering Handbook No. 4 (EHB-4), Engineering Management Reporting System (EMRS), Part 2, and Appendix I.
Include the following information on the WS Form A-26:

- a. An equipment code of **CRSSA** in block 7.
- b. A serial number of **001** in block 8.
- c. A Mod No. of **S3** in block 17a.

A sample WS Form A-26 is provided as attachment **B**.

Mark Paese (acting)
Chief, Maintenance, Logistics, and Acquisition Division

Attachment **A** - Installation Procedures
Attachment **B** - WS Form A-26 Sample

Attachment A
Installation Procedures

Attachment A

Installation Procedures

- | | |
|--------------|---|
| NOTE: | <ol style="list-style-type: none">1. Before proceeding with the actual modification, read the entire procedure.2. This installation requires completion of CRS Modification Note 65. VIP version 2.0 is installed over Version 1.3, which was installed as part of CRS Modification Note 65. Operation also depends on CRS Version 8 or later. (Version 8 installed as part of CRS Modification Note 65.)3. Ensure the VIP computer is powered-on and the VIP application is running. |
|--------------|---|

Overview

This modification note provides instructions to perform the CRS VIP software upgrade version 2.0 installation. The installation procedure contains five parts:

1. Pre-Installation Procedures
2. VIP Power-Down Procedures
3. VIP Power-On and Installing/Upgrading VIP to NWSVIPv2.0 Procedures
4. Configuring VIP after the NWSVIPv2.0 Software Upgrade Procedures

PART 1 – PRE-INSTALLATION PROCEDURES

- 1.1 Schedule CRS Down Time Procedure
 1. As a conservative estimate, schedule one hour for VIP software upgrade version 2.0 installation. This is a conservative estimate. Your actual time may be less; however, it may require more time, if you have problems.
 2. Before proceeding with the actual modification, read the entire procedure.

CAUTION

Before performing VIP software upgrade version 2.0 installation, ensure the CRS Modification Note 65 has been completed, the VIP computer is powered-on, and the VIP application is running.

PART 2 – VIP POWER-DOWN PROCEDURES

Stop the VIP application:

1. On the main *VIP* menu, click **Stop**.
2. Click **File**.
3. Click **System Shutdown**. The system displays *Shutdown the VIP System*.

4. Click **Yes**. The VIP computer shuts off and powers down (monitor power remains on).

PART 3 – VIP POWER-UP AND INSTALLING/UPGRADING VIP TO NWSVIPv2.0 PROCEDURES

3.1 Power-Up VIP Computer Procedure

1. Press the ON/OFF switch (front upper right corner of the enclosure) to power-up the VIP computer. A green power LED lights indicating power is on. The VIP goes through a memory check, displays the system configuration (as recognized by the basic input/output system (BIOS), then boots the LINUX operating system.
2. At the *LINUX login* prompt, login as user **root** and enter the root password defined as part of the initial VIP installation (Modification Note 65).
3. If the *Tip screen* appears, click **close**.
4. Note the date/time displayed in the lower right of the screen.
5. Click the **KDE Gear**, which causes a menu to be displayed.
6. Select **Preferences**, then select **System**, and then click on **Date & Time**, which displays the **K Date & Time - KDE Control Module** window.
7. Click the **Time Zone** tab, which displays the current time zone.
8. If the time zone is correct, skip to step 10, otherwise, click on the pull down list to select a city in your correct time zone.
9. Click **Apply** to invoke the time zone change.
10. Click the **Date & Time** tab, which displays the current date/time.
11. If the time is correct, skip to step 13, otherwise, change the date/time as needed.
12. Click **Apply** to invoke the date/time change. Note that the date/time displayed in the lower right of the screen reflects the change.
13. Click **OK** to save the changes and exit the **Date & Time** window.
14. Click the **Shell** icon (located in the lower left of the screen) to open a *Shell* window.
15. At the *Shell* prompt, type **/usr/bin/kedit /etc/sysconfig/clock** and press **Enter**. The contents of the clock file displays in the *kedit* screen:
ZONE="US/Eastern"
UTC=false
ARC=false
16. Change **UTC=false** to **UTC=true**.

17. Click **Save** icon to save the change.
18. Click **File** and **Quit** to exit the editor.
19. Insert the provided **NWSVIPv2.0 upgrade CD #1** of 3 into the CD-ROM. (The other CDs will be specified where needed.) The following steps mount and install the CD files.
20. At the prompt, type the following command to mount the CD-ROM drive:
mount /mnt/cdrom <Enter>
21. Execute the install procedure by typing:
/mnt/cdrom/VIPUpgrade <Enter>
22. Fill out the *VIP upgrade application* box with name, date, and site ID. To complete the install process, click **Begin Upgrade**.

NOTE:	<ol style="list-style-type: none">1. The installation takes approximately 20 to 30 minutes to complete.2. Some stages take longer than others (e.g., install Status may hold on 4% and 7% for 15 minutes).
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23. At the *Installation is Complete* box, click **Close** to complete the installation.
24. Remove the *VIP NWSVIPv2.0 upgrade CD #1* of 3.
25. Type **Exit**.
26. Right click the mouse on the desktop.
27. Select the **Logout** option.
28. Click **Logout** on the verification box.
29. At the *LINUX login* prompt, login as user **crs**. Remember to use the CRS system password set in (/crs/bin/ftp.ksh).

NOTE:	<ol style="list-style-type: none">3. ALWAYS run the VIP application as user crs!
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PART 4 – CONFIGURING VIP AFTER THE NWSVIPv2.0 SOFTWARE UPGRADE PROCEDURES

The next step, after a successful upgrade to NWSVIPv2.0, is to define local site configurations, managed through the *System Settings* interface. The following steps define the minimum requirements for an operational VIP application.

1. Double click on the **VIP Interface** icon.

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Issuance 02-17
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2. Select the button marked **System Settings** found on the main VIP interface.
3. Under *Options*, found on the menu bar of the *VIP Systems Settings interface*, select the function **Set Recommended Values**. Click **Yes** on the *Be sure* window. Click **OK** on the *VIP message* window.
4. Fill in the site specific information for the fields marked as **local** by the *Set Recommended values* function:

Male English	Enter the numeric IP address for local VIP machine.
Female English	Enter the numeric IP address for local VIP machine.
OMP address	Enter the numeric IP address for local OMP system.
5MP address	Enter the numeric IP address for local 5MP system.
Password	Enter the user crs password.
5. Select **OK** to save your entries.
6. At this point, VIP is ready for operational use. To run the *VIP application* click the **start** button found near the bottom of the *main VIP user interface*.

NOTE:

1. The settings described here define the minimum requirements to execute the VIP software properly. For more information about VIP features, reference the provided users guide by selecting **Help**, followed by **Help Menu** on any VIP user interface.
2. Before messages are processed by the VIP, the formatters must be modified to generate messages with the **C** set in the *Active/Inactive* flag in the *CRS weather message header*.
3. The VIP contains its own dictionary distinct from the existing CRS dictionary. Care must be taken to ensure words that are not pronounced appropriately by the VIP are included in the VIP dictionary with the preferred pronunciation.

Please note that some words in the CRS dictionary may not need to be included in the VIP dictionary, because VIP naturally pronounces them correctly. However, the converse is also true that some words CRS pronounces correctly will not be by the VIP and will have to be added to the VIP dictionary. The CRS dictionary must continue to be maintained independently of the VIP dictionary, since the old CRS synthetic voice (DECTalk) will remain the backup system if VIP should fail.

Attachment B
WS Form A-26 Sample

Attachment B - WS Form A-26 Sample

WS FORM A-26 (4/94)	WS FORM A-26 (4/94) U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE					Document Number G 49978			
ENGINEERING MANAGEMENT REPORTING SYSTEM MAINTENANCE RECORD									
General Information	1. Open Date 3 / 29 / 02	Time 0900	2. Initials JMM	3. Response Priority (check one) <input type="radio"/> Immediate <input type="radio"/> Low <input type="radio"/> Routine <input checked="" type="radio"/> Not Applicable	4. Close Date 3 / 29 / 02	Time 1000			
5. Description Upgrade VIP Software by installing version 2.0 I.A.W. CRS Software Note 3.									
Equipment Information	6. Station ID FFC	7. Equipment Code CRSSA	8. Serial Number 001	9. TM M	10. AT M	11. How Mal. 999			
12. EQUIPMENT OPERATIONAL STATUS TIMES	a. Fully Operational <input type="text"/>	b. Logistics Delay <input type="text"/>	Partly Operational	c. All Other <input type="text"/>	d. Logistics Delay <input type="text"/>	Not Operational e. All Other <input type="text"/>			
13. Parts Failure Information						14. Work Load Information			
Block #	a. ASN	b. NSN	c. TM	d. AT	e. How Mal.	f. Qty.	g. Maint. Hrs.	Type	Staff Hrs.
1								a. Routine	
2								b. Non-routine	
3								c. Travel	
4								d. Misc.	1:00
5								e. Overtime	
Miscellaneous Information		15. Maintenance Comments Upgraded VIP software to version 2.0 I.A.W. CRS Software Note 3.						16. Initials JMM	
17. SPECIAL PURPOSE REPORTING		a. Mod. No. S3	b. Mod./Act./Deact.Date 3/29/02	c.		d.		e.	
18. CONFIGURATION MGMT. REPORTING (use as directed)		ASN		Vendor Part Number (New Part)		Serial Number (Old Part)		Serial Number (New Part)	